

Amendments to the Claims

Claims 1-35 (Canceled).

36. (Currently Amended): A semiconductor processing method, comprising:

forming an antireflective coating comprising Ge and Se over a substrate to be patterned;

forming photoresist over the antireflective coating, the photoresist being different from the antireflective coating;

exposing the photoresist to actinic radiation effective to pattern the photoresist to form photoresist patterns over the antireflective coating, the antireflective coating reducing reflection of actinic radiation during the exposing than would otherwise occur under identical conditions in the absence of the antireflective coating;

after the exposing, patterning the substrate through openings in the photoresist and the antireflective coating using the photoresist patterns and the antireflective coating as a mask; and

after patterning the substrate, chemically etching the photoresist and the antireflective coating substantially completely from the substrate using a single etching chemistry.

37. (Original): The method of claim 36 wherein the single etching chemistry is wet.

38. (Original): The method of claim 36 wherein the single etching chemistry is dry.

39. (Currently Amended): ~~The method of claim 36~~ A
semiconductor processing method, comprising:

forming an antireflective coating comprising Ge and Se over a substrate to be patterned;

forming photoresist over the antireflective coating;

exposing the photoresist to actinic radiation effective to pattern the photoresist, the antireflective coating reducing reflection of actinic radiation during the exposing than would otherwise occur under identical conditions in the absence of the antireflective coating;

after the exposing, patterning the substrate through openings in the photoresist and the antireflective coating using the photoresist and the antireflective coating as a mask; and

after patterning the substrate, chemically etching the photoresist and the antireflective coating substantially completely from the substrate using a single etching chemistry, wherein the single etching chemistry is dry and comprises exposure to an oxygen plasma containing atmosphere..

40. (Canceled).

41. (Original): The method of claim 36 wherein the antireflective coating consists essentially of Ge and Se.

42. (Previously Presented): The method of claim 36 wherein the antireflective coating consists essentially of about 40 atomic percent Ge and about 60 atomic percent Se.

43. (Original): The method of claim 36 wherein the antireflective coating is substantially amorphous.

44. (Original): The method of claim 36 wherein the antireflective coating comprises at least 30 atomic percent Ge.

45. (Original): The method of claim 36 wherein the antireflective coating comprises from 30 atomic percent to 50 atomic percent Ge.

46. (Original): The method of claim 36 wherein the antireflective coating comprises from 38 atomic percent to 42 atomic percent Ge.

47. (Original): The method of claim 36 wherein the openings in the photoresist and the antireflective coating are formed by solvent processing of the photoresist after the exposing to form the photoresist openings, followed by dry etching of the antireflective coating through the photoresist openings.

48. (Original): The method of claim 47 wherein forming the openings in the antireflective coating comprises after said exposing, exposing the antireflective coating through the photoresist to radiation having a wavelength from about 190 nanometers to about 450 nanometers, and thereafter dry etching the antireflective coating in an oxygen comprising ambient.

49. (New): The method of claim 36 wherein the single etching chemistry is dry and comprises exposure to an oxygen plasma containing atmosphere.

50. (New): The method of claim 36 wherein the photoresist contacts the antireflective coating.

51. (New): The method of claim 36 wherein patterning the substrate comprises subtractive etching.

52. (New): The method of claim 36 wherein the chemical etching comprises dry etching comprising exposure to oxygen at a temperature of at least 100°C.

53. (New) The method of claim 36 wherein the antireflective coating has a total thickness which is less than that of the photoresist.

Amendments to the Drawings

Annotated and Replacement drawing sheets 1 and 3 containing Figures 1-3 and 7-9 are being submitted concurrently herewith by separate paper entitled "Letter Submitting Formal Drawings". The drawings include changes to Figs. 2 and 9. These sheets, which includes Figs. 1-3 and 7-9, replace the original sheets including Figs. 1-3 and 7-9. No new matter is added.